Restriction list (annex XVII)

Date: 2020-08-03

Name	CAS no. (not exhaustive)	Entry no	b. Conditions (Simplified, please see ECHA website for details)	Probable Presence professional EEE intention to release?	in Comments w/o
Polychlorinated terphenyls (PCTs)	-	01	Restricted as a substance and in a mixture including waste oils, of in equipment <50 mg/kg (0,005 % by weight).		Used in electric transformers, as plasticizer, lubricating oils, flame-retardant. https://www.ec.gc.ca/toxiques-toxics/Default.asp?lang=En&n=98E80CC6-1&xml=1B9628F6-650F-437C-8B9E-87FE14EE7E78
Chloroethene, Chloroethylene (Vinyl chloride)	1975-01-04	02	Shall not be used as propellant in aerosols for any use. Aerosols dispensers containing the substance as propellant shall not be placed on the market.		
Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes of categories set out in Annex I to Regulation (EC) No 1272/2008 (See group members) Hazard class 4.1, Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10, Hazard classes 2.1 to 2.4, 2.6 and 2.7, 2.8 types A and B, 2.9, 2.10, 2.12, 2.13 categories 1 and 2.14 categories 1 and 2, 2.15 types A to F, Hazard class 5.1.	r): d d	03	Banned in ornamental articles, tricks and jokes or articles fo gaming purpose; Banned in decorative oil lamps for supply to the general public; Additional labelling requirements for lamp oils, grill lighter fluids grill lighters, etc.		
Tris (2,3 dibromopropyl) phosphate	126-72-7	04	Banned in any textile article intended to come into contact with the skin	e No	
Benzene	71-43-2	05	Toy or toy parts: <=5 mg/kg (0, 0005 %w/w) in toy or part of toy. Shall not be placed on the market, or used, as substance or ir mixtures in concentrations greater than 0,1 % w/w (example detergent). Exception: motor oil, industrial use.		
Asbestos fibres	12001-28-4, 12001-29-5, 132207-32-0, 12172-73-5, 77536-66-4 77536-67-5, 77536-68-6	4, 06	Banned as a substance, in mixture or article (exemptions apply)	Yes	Has been used in thermal and electrical insulation, coating, plastics, firefighting garments. https://web.archive.org/web/20110429155522/http://ntp.niehs.nih.gov/ntp/roc/eleventh/profiles/s016asbe.pdf
Tris(aziridinyl)phosphinoxide	545-55-1	07	Banned in textile articles, such as garments, undergarments and linen, intended to come into contact with the skin.	i No	
Polybromobiphenyls, Polybrominatedbiphenyls (PBB)	59536-65-1	08	Banned in textile articles, such as garments, undergarments and linen, intended to come into contact with the skin.	i No	Is a RoHS substance
Benzidine and / or its derivatives, Powder of the roots of Helleborus viridis and Helleborus niger, Wood powder, Powder of the roots of Veratrum album and Veratrum nigrum, o Nitrobenzaldehyde, Soap bark powder (Quillaja saponaria) and its derivatives containing saponines	-	09	Banned in jokes and hoaxes or in mixtures or articles intended to be used as such, for instance as a constituent of sneezing powder and stink bombs. Exemption for stink bombs containing not more than 1,5 ml of liquid.	r	
Ammonium hydrogen sulphide, Ammonium sulphide, Ammonium polysulphide	12124-99-1, 12135-76-1, 9080-17-5	10	Banned in jokes and hoaxes or in mixtures or articles intended to be used as such, for instance as a constituent of sneezing powder and stink bombs. Exemption for stink bombs containing not more than 1,5 ml of liquid.	r	
Volatile esters of bromoacetic acids (Ethyl bromoacetate, Butyl bromoacetate, Propybromoacetate, Methyl bromoacetate)	/l 105-36-2, 18991-98-5, 35223-80-4, 96-32-2	11	Banned in jokes and hoaxes or in mixtures or articles intended to be used as such, for instance as a constituent of sneezing powder and stink bombs. Exemption for stink bombs containing not more than 1,5 ml of liquid.	r	
2-naphthylamine and its salts (Salts of 2-naphthylamine, 2-naphthylammonium acetate, 2 naphthylammonium chloride, 2-naphthylamine)	- 553-00-4, 612-52-2, 91-59-8	12	Restricted as substances or in mixtures in concentrations greate than 0,1 % by weight.	r No	Was used as an intermediate in the manufacture of dyes, as an antioxydant in the rubber industry and to produce 2-chloronaphthalene. https://monographs.iarc.fr/ENG/Monographs/vol100F/mono100F-10.pdf
Benzidine and its salts, Salts of benzidine, Benzidine	92-87-5	13	Restricted as substances or in mixtures in concentrations greated than 0,1 % by weight.	r No	The main use is in the production of dyes, especially azo dyes in the leather, textile and paper industries. https://www.epa.gov/sites/production/files/2016-09/documents/benzidine.pdf
4-Nitrobiphenyl	92-93-3	14	Restricted as substances or in mixtures in concentrations greate than 0,1 % by weight.	r No	Plastixizer, fungicide, wood preservative and dye intermediate. http://nj.gov/health/eoh/rtkweb/documents/fs/0229.pdf
4-Aminobiphenyl xenylamine and its salts, 4-Aminobiphenyl xenylamine	92-67-1	15	Restricted as substances or in mixtures in concentrations greated than 0,1 % by weight.	r No	Was used as a colour additive. Is also a SVHC. https://monographs.iarc.fr/ENG/Monographs/vol99/mono99-8.pdf

Lead carbonates (Trilead-bis(carbonate)-dihydroxide 2PbCO3-Pb(OH)2, Ne anhydrous carbonate (PbCO3))	utral 1319-46-6, 598-63-0	16	Banned in paints. Possible exemption for the restoration and Yes maintenance of works of art and historic buildings and their interiors.	Preparation of Positive Temperature Coeffient (PCT) Ceramic Materials. 1319-46-6 is also and SVHC. http://echa.europa.eu/documents/10162/cf4ed905-0f2f-47e5-978a-7a9bfb06595a
Lead sulphates (Sulphuric acid, lead salt Pbx SO4, Lead sulphate PbSO4)	15739-80-7, 7446-14-2	17	Banned in paints. Possible exemption for the restoration and Yes maintenance of works of art and historic buildings and their interiors.	In paint pigments. Is a RoHS susbtance. http://nj.gov/health/eoh/rtkweb/documents/fs/1114.pdf
Mercury compounds	-	18	Banned as substances or in mixtures where the substance or No mixture is intended for use to prevent the fouling by microorganisms, plants or animals (e.g. hulls of boats, cages, floats, nets, submerged applicanes or equipent), in the preservation of wood, in the impregnation of heavy-duty industrial textiles and yarn intended for their manufacture, in the treatment of industrial waters.	Is a RoHS substance
Mercury	7439-97-6	18a	Banned in fever thermometers and other measuring (e.g. No barometers, hygrometers, manometers, sphygmomanometers, tensiometers, etc). Exemptions apply.	Is a RoHS substance
hexafluoroarsenate, Diphenyldiarsenic acid, Neoarsphenamine, Oxophenal hydrochloride, Tris[(8α,9R)-6'-methoxycinchonan-9-ol] bis(arsenate), Triphenylsulphon hexafluoroarsenate(1-), Zirconium arsenide, Trimanganese arsenide, Sodium cacod trihydrate, Sulfarsphenamine, Disodium 3,6-bis[(o-arsonophenyl)azo]	zed, 5, 10102-50-8, 10103-50-1, 10103-61-4, 10103-62-5, acid, salt, 6, 12005-88-8, 12005-89-9, 12005-92-4, 12005-94-6 filium 7, 12006-08-5, 12006-09-6, 12006-10-9, 12006-12-1 filium 2, 12006-40-5, 12044-16-5, 12044-20-1, 12044-21-2 nide, 3, 12044-25-6, 12044-28-9, 12044-49-4, 12044-54-1 nide,	1, 102110-21- 1, 12005-86- 5, 12005-95- 1, 12006-21- 2, 12044-22- 1, 12044-55- 12255-04-8, 12255-48-0, 1, 124-65-2, -33-9, 1303- -4, 13464-38- 8, 13478-14- 17029-22-0, 24719-19-5, 28980-47-4, 32680-29-8, -15-0, 4519- 60909-47-9, 62613-15-4, 64973-06-4, 68892-01-3, 70333-07-2, -0, 7778-44- 4-36-3, 7784- , 7784-45-4,	Banned as substances or in mixtures where the substance or No mixture is intended for use to prevent the fouling by microorganisms, plants or animals (e.g. hulls of boats, cages, floats, nets, submerged applicanes or equipent), in the preservation of wood. Possible exemptions.	No predicted presence for the banned application. However, arsenic can be found in electronics (Gallium arsenide is an important semiconductor material, insed in ICs, in laser diodesand LEDs). 1303-28-2, 1327-53-3, 3687-31-8, 7778-44-1, 7778-39-4 and 7784-40-9 are SVHCs.
Organostannic compounds (TBT,TPT,DBT, DOT etc.)	-	20	Restricted as substances or in mixtures where the substance or No mixture is acting as biocide in free association paint to prevent the fouling by micro-organisms, plants or animals. Threshold limits of Tri-substituted organostannic compounds: <0.1%w/w in all articles; Dibutyltin (DBT) compounds: <0.1%w/w in all mixtures and articles supplied to the public; DBT exception: materials and articles regulated under Regulation (EC) No 1935/2004. Dioctyltin (DOT) compound: <0.1%w/w in articles supplied to the public (for example, textile, nappies)	No predicted presence for the banned application. However, organostannic compounds are used as stabilizers for PVC, as antifouling biocides and as catalysts for the production of polyurethanes and silicones.
Di-μ-oxo-di-n-butylstanniohydroxyborane / Dibutyltin hydrogen borate C8H19BC (DBB)	3Sn 75113-37-0	21	Restricted as a substance, or in mixtures in a concentration equal No to, or greater than 0,1 % by weight (possible exemption)	No known usage in articles.
Pentachlorophenol and its salts and esters, Pentachlorophenol esters, Pentachlorophenol salts, Sodium pentachlorophenolate, N2-benzyl pentachlorophenyl N2-carboxylaminoglutaramate), Perchlorophenyl N-(benzyloxycarbonyl)-L-isoleucii Perchlorophenyl S-benzyl-N-(benzyloxycarbonyl)-L-cysteinate, Pentachlorophenyl N-methoxyphenyl)methoxy]carbonyl]-L-serinate, Perchlorophenyl 5-oxo-L-prolinate, bis(pentachlorophenolate), Pentachlorophenyl laurate, Potassium pentachlorophenol	(2- 28990-85-4, 2917-32-0, 3772-94-9, 7778-73-6, 87-86 nate, -[[(4- Zinc		Restricted use: as a substance, or in mixtures in a concentration No equal to, or greater than 0,1 % by weight	Used as herbicide, insecticide, fungicide, algaecide, and disinfectant and as an ingredient in anti-fouling paint. Some applications were in agricultural seeds (for nonfood uses), leather, masonry, wood preservation, cooling tower water, rope, and paper mills. http://www.who.int/water_sanitation_health/dwq/chemicals/pentachloro phenol.pdf

Bis(dibutyldithiocarbamato-S,S')cadmium, Bis(pentane-2,4-dionato-O,O')cadmiun Tris(ethylenediamine)cadmium dihydroxide, Cadmium diicosanoate, Cadmiub bis(piperidine-1-carbodithioate), Bis(dimethyldithiocarbamato-S,S')cadmium, Lauric acibarium cadmium salt, Disodium tetrakis(cyano-C)cadmate(2-), Dipotassium [[N,Nethylenebis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,ON']cadmate(2-), Cadmium	e, 9, 101012-93-5, 101012-94-6, 10108-64-2, 10124-36-4, 31119-d, 53-6, 101356-99-4, 101357-00-0, 101357-01-1, 101357-02-2, m 101357-03-3, 101357-04-4, 10196-67-5, 102110-30-5, 102184-104 95-2, 10326-28-0, 10468-30-1, 11112-63-3, 1191-79-3, 12014-14-14-14-11, 12014-28-7, 12014-29-8, 12139-23-0, 12185-64-7, 12187-14-12-9, 12292-07-8, 12442-27-2, 12626-36-7, 12656-57-12-13-13-12-14-12-9, 1366-23-6, 1306-24-7, 1306-25-8, 13477-17-3, 121477-19-5, 13477-23-1, 13701-66-1, 13755-33-4, 13814-59-0, 13477-19-5, 13477-23-1, 13701-66-1, 13755-33-4, 13814-59-0, 141-46-25, 13832-25-2, 13847-17-1, 13972-68-4, 14017-36-8, 14067-62-0, 141-00-4, 14239-68-0, 14312-00-6, 14402-75-6, 14486-19-2, 14566-86-0, 14689-45-3, 14874-24-9, 14923-81-0, 14949-59-8, 14949-60-1, 15337-60-7, 15682-87-8, 15708-29-9, 11, 15743-19-8, 15851-44-2, 15852-14-9, 16039-55-7, 16056-72-7, 16105-06-9, 16986-83-7, 17010-21-8, 18974-20-4, 18991-05-4, 16105-06-9, 16986-83-7, 17010-21-8, 18974-20-4, 18991-05-4, 16105-06-9, 16986-83-7, 17010-21-8, 18974-20-4, 18991-05-4, 161017-44-4, 31215-94-8, 34100-40-8, 34303-23-6, 35658-65-2, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30304-32-6, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30304-32-6, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30304-32-6, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30304-32-6, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30304-32-6, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30304-32-6, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30304-32-6, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30304-32-6, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30304-32-6, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30304-32-6, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30304-32-6, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30304-32-6, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30304-32-6, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30304-32-6, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30304-32-6, 1627476-27-3, 2847-16-7, 29977-13-7, 3026-22-0, 30		Restricted in mixtures, paints, coating, brazin fillers and articles Yes (0.01 % w/w in PVC, PUR, LDPE, CA, CAB, epoxy resins, MF, UF, UP, PET, PBT, VPE, polystyrene PP etc.). Applicable exemptions.	Are RoHS substances and 10108-64-2, 10124-36-4, 1306-19-0, 1306-23-6, 31119-53-6, 7440-43-9 and 7790-79-6 are SVHCs
Monomethyl-tetrachlorodiphenyl methane Trade name: Ugilec 141	76253-60-6	24	Banned as substances or in mixtures or articles. Applicable Yes exemption.	Was used to replace polychlorinated biphenyls (PCBs), in capacitors and transformers as a dielectric fluid. TETRACHLOROBENZYLTOLUENES July 2002. NATIONAL INDUSTRIAL CHEMICALS NOTIFICATION AND ASSESSMENT SCHEME. GPO Box 58, Sydney NSW 2001, Australia www.nicnas.gov.au
Monomethyl-dichloro-diphenyl methane Trade name: Ugilec 121, Ugilec 21	-	25	Banned as substances or in mixtures or articles. Yes	Was used to replace polychlorinated biphenyls (PCBs), in capacitors and transformers as a dielectric fluid. TETRACHLOROBENZYLTOLUENES July 2002. NATIONAL INDUSTRIAL CHEMICALS NOTIFICATION AND ASSESSMENT SCHEME. GPO Box 58, Sydney NSW 2001, Australia www.nicnas.gov.au
Monomethyl-dibromo-diphenyl methane bromobenzylbromotoluene, mixture of isomer Trade name: DBBT	rs 99688-47-8	26	Banned as substances or in mixtures or articles. Yes	Was used to replace polychlorinated biphenyls (PCBs), in capacitors and transformers as a dielectric fluid. http://archive.pic.int/CH/Demo/embed/view displayFRA.php?id=705
Nickel and its compounds - Nickel compounds - Nickel	7440-02-0	27	Restrictions in any post assemblies which are inserted into pierced Yes ears and other pierced parts of the human body and in articles intended to come into direct and prolonged contact with the skin (e.g. earrings, necklaces, bracelets, chains etc.)	Possible presence in parts that are can be touched by the user (e.g. buttons, casing, viewfinders etc.)
Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/200 classified as carcinogen category 1A or 1B (Table 3.1) or carcinogen category 1 or (Table 3.2) and listed as follows (See group members): Carcinogen category 1B (Table 3.1)/ carcinogen category 2 (Table 3.2) listed in Appendix 2, Carcinogen category 1 (Table 3.1)/ carcinogen category 1 (Table 3.2) listed in Appendix 1	2 le	28	Restricted as substances, constituents of other substances or in No mixtures. Applicable exemptions.	Covers dozens of substances, such as Chromium VI which is a RoHS substance.
Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/200 classified as germ cell mutagen category 1A or 1B (Table 3.1) or mutagen category 1 or (Table 3.2) and listed as follows (See group members): Mutagen category 1B (Table 3.1 mutagen category 2 (Table 3.2) listed in Appendix 4, Mutagen category 1A (Table 3.1 mutagen category 1 (Table 3.2) listed in Appendix 3.	2)/	29	Restricted as substances, constituents of other substances or in No mixtures. Applicable exemptions.	Covers dozens of substances, such as benzene which can be found in EEE. Some of the listed substances are SVHCs.

Substances which appear in Part 3 of Annex VI to Regulation (EC) No 1272/200 classified as toxic to reproduction category 1A or 1B (Table 3.1) or toxic to reproduction category 1 or 2 (Table 3.2) and listed as follows (See group members): Reproductive toxicant category 1B adverse effects on sexual function and fertility or on developmer (Table 3.1) or reproductive toxicant category 2 with R60 (May impair fertility) or R61 (Macause harm to the unborn child) (Table 3.2) listed in Appendix 6, Reproductive toxicant category 1A adverse effects on sexual function and fertility or on development (Table 3.1 or reproductive toxicant category 1 with R60 (May impair fertility) or R61 (May cause harm to the unborn child) (Table 3.2) listed in Appendix 5	n re nt ny nt I)	30	Restricted as substances, constituents of other substances or in No mixtures. Applicable exemptions.	Covers dozens of substances such as lead compounds wich are RoHS substances and various pigments
Low temperature tar oil, alkaline; extract residues (coal), low temperature coal tar alkaline Creosote oil; wash oil. Tar acids, coal, crude; crude phenols. Distillates (coal tar), uppe heavy anthracene oil. Creosote; wash oil. Creosote, wood. Distillates (coal tar naphthalene oils; naphthalene oil. Anthracene oil. Creosote oil, acenaphthene fraction wash oil.	r; 8021-39-4, 84650-04-4, 90640-80-5, 90640-84-9),	8-9, 31	Banned use: treatment of wood. Applicable exemptions. No	90640-80-5 is a SVHC
Chloroform	67-66-3	32	Restricted as a substance, or in mixtures in a concentration equal No to, or greater than 0,1 % by weight where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics. "For use in industrial installations only" labels. (possible exemptions for medicinal or veterinary products and cosmetic products)	Used as solvent, pesticide formulations, as a solvent for fats, oils, rubber, alkaloids, waxes, gutta-percha, and resins, as a cleansing agent, grain furnigant, in fire extinguishers, and in the rubber industry, reagent and anesthetic.
1,1,2-Trichloroethane	79-00-5	34	Restricted as a substance, or in mixtures in a concentration equal No to, or greater than 0,1 % by weight where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics. "For use in industrial installations only" labels. (possible exemptions for medicinal or veterinary products and cosmetic products)	Used as a solvent and as an intermediate in the synthesis of 1,1-dichloroethane.
1,1,2,2-Tetrachloroethane (R-130)	79-34-5	35	Restricted as a substance, or in mixtures in a concentration equal No to, or greater than 0,1 % by weight where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics. "For use in industrial installations only" labels. (possible exemptions for medicinal or veterinary products and cosmetic products)	Used as a solvent and refrigerant.
1,1,1,2-Tetrachloroethane	630-20-6	36	Restricted as a substance, or in mixtures in a concentration equal No to, or greater than 0,1 % by weight where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics. "For use in industrial installations only" labels. (possible exemptions for medicinal or veterinary products and cosmetic products)	Used as a solvent and in the production of wood stains and varnishes.
Pentachloroethane	1976-01-07	37	Restricted as a substance, or in mixtures in a concentration equal No to, or greater than 0,1 % by weight where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics. "For use in industrial installations only" labels. (possible exemptions for medicinal or veterinary products and cosmetic products)	Used as a solvent for oil and grease, in metal cleaning, and in the separation of coal from impurities.
1,1-Dichloroethene	75-35-4	38	Restricted as a substance, or in mixtures in a concentration equal No to, or greater than 0,1 % by weight where the substance or mixture is intended for supply to the general public and/or is intended for diffusive applications such as in surface cleaning and cleaning of fabrics. "For use in industrial installations only" labels. (possible exemptions for medicinal or veterinary products and cosmetic products)	Is used as a comonomer in the polymerization of vinyl chloride, acrylonitrile, and acrylates. It is also used in semiconductor device fabrication for growing high purity silicon dioxide (SiO2) films.
Substances classified as flammable gases category 1 or 2, flammable liquids categorie 1, 2 or 3, flammable solids category 1 or 2, substances and mixtures which, in contact with water, emit flammable gases, category 2 or 3, pyrophoric liquids category 1 or pyrophoric solids category 1, regardless of whether they appear in Part 3 of Annex VI to Regulation (EC) No 1272/2008 or not	1,	40	Banned as substances or as mixtures in aerosol dispensers where No these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes (e.g. artificial snow, imitation excrement, horns for parties, stink bombs etc.). 'For professional users only' for other use of aerosol dispensers label. Applicable exemptions.	

Hexachloroethane	67-72-1	41	Banned as substance or in mixtures, where the substance or No mixture is intended for the manufacturing or processing of non-ferrous metals.	
Azocolourants and Azodyes	Please see 1907/2006/EC Appendices 8 and 9	43	Restricted in textile and leather articles which may come into direct No and prolonged contact with the human skin or oral cavity (e.g. clothing, bedding, towels, gloves, chair cover, etc.) (threshold 0.003 % w/w). <0.1% w/w in mixture for Azodyes which are contained in Appendix 9 - 'List of azodyes' and are intended for colouring textile and leather articles.	
Diphenylether, octabromo derivative C12H2Br8O	-	45	Restricted as a substance, in mixtures or in articles or flame- Yes retardant parts in a concentration equal to, or greater than 0,1 % by weight. (possible exemptions for some articles and electrical and electronic equipment)	Is used as a flame retardant additive for polymers, primarily in acrylonitrile-butadiene-styrene (ABS) polymers. The main end-use for these polymers is for the housings of office equipment and business machines. However, Electrical and electronic equipment within the scope of Directive 2002/95/EC are exempted. https://echa.europa.eu/documents/10162/01e59081-67a9-473b-8093-4df8bf646ee5
Nonylphenol ethoxylates (C2H4O)nC15H24O, Nonylphenol C6H4(OH)C9H19,	25154-52-3	46	Restricted as a substance or in mixtures in a concentration equal No to, or greater than 0,1 % by weight, in domestic, industrial and institutional cleaning, textile and leather processing, emulsifier in agricultural teat dips, metal working, manufacturing of pulp and paper, cosmetic products, other personal care products and coformulants in pesticides and biocides. (possible exemptions)	
Nonylphenol ethoxylates (C2H4O)nC15H24O. 4-Nonylphenol, branched, ethoxylated. Anonylphenol, ethoxylated. Isononylphenol, ethoxylated. Nonylphenol, branched, ethoxylated. Nonylphenol, ethoxylated. Nonylphenol, ethoxylated.	d, 9016-45-9	4, 46a	Restriction after 3 February 2021 in textile articles which can No reasonably be expected to be washed in water during their normal lifecycle, in concentrations equal to or greater than 0,01 % by weight of that textile article or of each part of the textile article.	
Chromium VI compounds	-	47	Restricted as a substance or in mixtures, in cement and cement- No containing mixtures if they contain, when hydrated, more than 2 mg/kg (0,0002%) soluble chromium VI of the total dry weight of the cement. Restricted in leather articles and articles containing leather parts coming into contact with the skin. Applicable exemptions.	Are RoHS substances
Toluene	108-88-3	48	Restricted as a substance or in mixtures in a concentration equal No to, or greater than 0,1 % by weight, where the substance or mixture is used in adhesives or spray paints intended for supply to the general public.	
Trichlorobenzene	120-82-1	49	Restricted as a substance or in mixtures in a concentration equal No to, or greater than 0,1 % by weight. Applicable exemptions.	Used as a solvent, this compound is a useful precursor to dye and pesticides.
Polycyclic-aromatic hydrocarbons (PAH) - Benzo[e]pyrene (BeP), Benzo[j]fluoranthere (BjFA), Benzo[b]fluoranthene (BbFA), Benzo[k]fluoranthene (BkFA), Chrysen (CHR Benzo[a]pyrene (BaP), Dibenzo[a,h]anthracene (DBAhA), Benzo[a]anthracene (BaA)		3- 50	Extender oils shall not be placed on the market, or used for the No production of tyres or parts of tyres if they contain — more than 1 mg/kg (0,0001 % by weight) BaP, or — more than 10 mg/kg (0,001 % by weight) of the sum of all listed PAHs. Articles shall not be placed on the market for supply to the general public, if any of their rubber or plastic components that come into direct as well as prolonged or short-term repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use, contain more than 1 mg/kg (0,0001 % by weight of this component) of any of the listed PAHs (e.g. sport equipment, etc). Toys, including activity toys, and childcare articles, shall not be placed on the market, if any of their rubber or plastic components that come into direct as well as prolonged or shortterm repetitive contact with the human skin or the oral cavity, under normal or reasonably foreseeable conditions of use, contain more than 0,5 mg/kg (0,00005 % by weight of this component) of any of the listed PAHs. Applicable definitions, standards and exemptions.	Unless the EEE is an article for general public or a toy. Used in tyres, rubber, plastic, toys
The following phthalates: Benzyl butyl phthalate (BBP), Bis (2-ethylhexyl) phthalate (DEHP), Dibutyl phthalate (DBP), Diisobutyl phthalate (DIBP)	117-81-7, 84-74-2, 84-69-5, 85-68-7	51	Restricted in a concentration greater than 0,1 % by weight of the No plasticised materials, in toys and childcare articles.	They are also EU RoHS and SVHC.
The following phthalates: Di-n-octyl phthalate (DNOP), Di-"isodecyl" phthalate (DIDP), Di-"isononyl" phthalate (DINP), 1,2-Benzenedicarboxylic acid, di-C8-10-branched alk esters, C9-rich, 1,2-Benzenedicarboxylic acid, di-C9-11-branched alkyl esters, C10-rich		52	Restricted in a concentration greater than 0,1 % by weight of the No plasticised materials, in toys and childcare articles which can be placed in the mouth of children.	Unless the EEE is a toy.

2-(2-butoxyethoxy)ethanol (DEGBE)	112-34-5	55	floor sealants in concentrations equal to or greater than 0,1 % by weight. Restricted for supply to the general public, as a constituent of No	brake fluid, and in some skin creams and cleansers. https://www.canada.ca/en/health-canada/services/chemical-substances/challenge/batch-3/degme.html DEGBE has a wide range of uses as a solvent in paints, dyes, inks,
			spray paints or spray cleaners in aerosol dispensers in concentrations equal to or greater than 3 % by weight. Labelling requirements for paints other than spray paints "Do not use in paint spraying equipment".	detergents and cleaners. The major function is to dissolve various components of mixtures in both aqueous and nonaqueous systems. https://ec.europa.eu/health/ph_risk/committees/04_sccp/docs/sccp_o_081.pdf
Methylenediphenyl diisocyanate (MDI) including the following specific isomers: 4,4 Methylenediphenyl diisocyanate, 2,2'-Methylenediphenyl diisocyanate, Methylenediphenyl diisocyanate (MDI), 2,4'-Methylenediphenyl diisocyanate	yl	56	Restricted for supply to the general public, as a constituent of No mixtures in concentrations equal to or greater than 0,1 % by weight. Applicable exemption (with protective equipment and marking requirements)	However, MDI can be found in EEE since they are used to produce polyurethane foams and noncellular (compact) PUR polymers including coatings, elastomers, adhesives, textiles, and paints.
Cyclohexane	110-82-7	57	Restricted for supply to the general public, as a constituent of No neoprene-based contact adhesives in concentrations equal to or greater than 0,1 % by weight in package sizes greater than 350 g. Applicable exemption (with marking requirements)	
Ammonium nitrate (AN)	6484-52-2	58	Restricted as a substance, or in mixtures that contain more than 28 No % by weight of nitrogen in relation to ammonium nitrate, for use as a solid fertiliser, straight or compound. Otherwise restricted as a substance, or in mixtures that contain 16 % or more by weight of nitrogen in relation to ammonium nitrate. Applicable exemptions.	
Dichloromethane	1975-09-02	59	Restricted in paint strippers containing dichloromethane in a No concentration equal to or greater than 0,1 % by weight. Applicable exemptions.	
Acrylamide	1979-06-01	60	Restricted as a substance or in mixtures in a concentration equal to No or greater than 0,1 % by weight, for grouting applications.	Is a SVHC. Used in the production of polyacrylamides (flocculator) https://echa.europa.eu/documents/10162/50218bf9-ba0f-4254-a0d9-d577a5504ca7 http://enhs.umn.edu/current/5103/acryl/uses.html
Dimethylfumarate (DMF)	624-49-7	61	Restricted in articles or any parts in concentrations greater than 0,1 No % by weight.	Used as a biocide in furniture or shoes (anti-mould agent). https://echa.europa.eu/documents/10162/13641/background_doc_seac_rac_dmfu_en.pdf
Phenylmercury propionate, Phenylmercury 2-ethylhexanoate, Phenylmercury octanoat Phenylmercury neodecanoate, Phenylmercury acetate		62	Restricted in substances, mixtures, articles or any parts in Yes concentrations of mercury greater than 0,1 % by weight (after October 2017)	Are RoHS substances. Used as a catalysts in the production of polyurethane coatings, adhesives, sealants and elastomers. bunerous appications in gaskets and seals, as encapsulant for electronic assemblies, in film and television props, in vibration dampers, for clear polyurethane on labels, water resistant coatings and concrete sealants, for boat repair and repair on conveyor belts, in rollers on swivel chairs and roller skates and in shoe soles. https://echa.europa.eu/documents/10162/4a71bea0-31f0-406d-8a85-59e4bf2409da http://www.nj.gov/health/eoh/rtkweb/documents/fs/1502.pdf
Lead and its compounds	7439-92-1	63	Restricted in any individual part of jewellery articles and in articles No or accessible parts that may, during normal or reasonably foreseeable conditions of use, be placed in the mouth by children, in concentrations greater than 0,05 % by weight. Applicable definitions and exemptions.	Unless the EEE is an article which out of RoHS Directive 2011/65/EU and accessible to children. Are RoHS substances.
1,4-Dichlorobenzene	106-46-7	64	Restricted as a substance or as a constituent of mixtures in a No concentration equal to or greater than 1 % by weight, where the substance or the mixture is placed on the market for use or used as an air freshener or deodoriser in toilets, homes, offices or other indoor public areas.	Is used mainly as a fumigant for the control of moths, molds, and mildews, and as a space deodorant for toilets and refuse containers. Is also used as an intermediate in the production of other chemicals, in the control of tree-boring insects, and in the control of mold in tobacco seeds. https://www.epa.gov/sites/production/files/2016-09/documents/1-4-dichlorobenzene.pdf
Inorganic ammonium salts	-	65	Shall not be placed on the market, or used, in cellulose insulation No mixtures or cellulose insulation articles after 14 July 2018. Exemptions and conditions apply.	Used in cellulose insulation mixture.

4,4'-isopropylidenediphenol Bisphenol A; BPA	29348	66	Shall not be placed on the market in thermal paper in a No concentration equal to or greater than 0,02 % by weight after 2 January 2020	Used in thermal paper invoices. Is also used in the production of polycarbonate plastic (PC), and epoxy resins. It also has uses in polyester, polysulfone and polyacrylate resins, and flame retardants. Polycarbonate (PC) is widely used in food contact materials such as infant feeding bottles, tableware, microwave ovenware, food containers, water bottles, milk and beverage bottles, processing equipment and water pipes. Epoxy resins are used as protective linings for a variety of canned foods and beverages and as a coating on metal lids for glass jars and bottles, including containers used for infant formula. http://www.who.int/foodsafety/publications/fs_management/No_05_Bis phenol_A_Nov09_en.pdf
Bis(pentabromophenyl)ether (decabromodiphenyl ether; decaBDE)	1163-19-5	67	May not be manufactured or placed on the market as a substance Yes on its own, or as a mixture, component, article, or any part thereof in a concentration equal to or greater than 0.1% by weight, after March 2017. Aircraft production is exempt from this new restriction until March 2, 2027. And there are exemptions for electrical and electronic equipment within the scope of Directive 2011/65/EU with PBDE restrictions, motor vehicles within the scope of Directive 2007/46/EC, agricultural and forestry vehicles within the scope of Regulation (EU) No 167/2013, and machinery within the scope of Directive 2006/42/EC.	Is regulated under RoHS substance. Is widely used as an additive flame retardant with applications in many different sectors including the electrical and electronic industry, in particular in plastic articles but also in adhesives, sealants, coatings and inks.
Pentadecafluorooctanoic acid (PFOA) and its salts and related substances	335-67-1 and others	68	Shall not be manufactured, or placed on the market as substances Yes on their own from 4 July 2020. Shall not, from 4 July 2020, be used in the production of, or placed on the market in another substance, as a constituent, a mixture, or an article, in a concentration equal to or above 25 ppb of PFOA including its salts or 1 000 ppb of one or a combination of PFOA-related substances. Deadline is 4 July 2022 for equipment used to manufacture semi-conductors and 4 July 2032 to medical devices other than implatable medical devices. Exemptions apply: e.g. Photo-lithography processes for semiconductors or in etching processes for compound semiconductors and semiconductors & compound semiconductors reffered to them.	PFOA (Teflon) is a SVHC and restricted under the REACh annex XVII, and a POP susbtance. Insulators, solder sleeves, use in various mechanical components (e.g. semiconductors, wiring, tubing, piping, seals, gaskets, cables, working fluids in mechanical vacuum pumps). Raw material for components such as low-friction bearings & seals, lubricants. Active ingredient in ant baits, enhancers in pesticide formulations. Cable & wiring coating for weathering, flame and soil resistance. Can be used in rigid, flexible, and hybrid printed circuit boards, especially those PCBs used for high frequency and microwave applicationsAdditives in paints and coatings. Film to cover solar collectors due to eatherability. Raw materials for fire-fighting equipment, including protective clothing; fuel repellents for fluoroprotein (FP) foam stabilizers. Wetting agent or surfactant in floor polishes and cleaning agents. Surgical patches cardiovascular grafts, raw material for implants in the human body; stainand water-repellents for surgical drapes and gowns. Photographic and imaging industry. Paper and packaging oil and grease repellent. Skiing wax. Possible exemption for semiconductors. https://echa.europa.eu/documents/10162/e9cddee6-3164-473d-b590-8fcf9caa50e7
Methanol	67-56-1	69	Shall not be placed on the market to the general public after 9 May No 2019 in windscreen washing or defrosting fluids, in a concentration equal to or greater than 0,6 % by weight.	Is used as a solvent, antifreeze in pipelines and windshield washer fluid
Octamethylcyclotetrasiloxane (D4); Decamethylcyclopentasiloxane (D5)	541-02-6, 556-67-2	70	Shall not be placed on the market in wash-off cosmetic products in No a concentration equal to or greater than 0,1 % by weight of either substance, after 31 January 2020.	The uses of D4 can be divided into four main areas: as a site-limited chemical intermediate at the site of production; as an off-site chemical intermediate; in personal care products (e.g. cosmetic products, and skin- and hair-care products); in household products (e.g. cleaning products). https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/290565/scho0309bpqz-e-e.pdf D5 is commonly used as volatile excipient in cosmetic products. The main use of D5 in cosmetic products is in skin care products, deodorants/antiperspirants, hair care products and make up products. https://ec.europa.eu/health/scientific_committees/consumer_safety/docs/sccs_o_174.pdf

1-methyl-2-pyrrolidone (NMP)	872-50-4	71	Shall not be placed on the market nor manufactured or used as a No substance on its own or in mixtures in a concentration equal to or greater than 0,3 % after 9 May 2020. Possible derogation for solvent and reactant in the process of coating wires.	Used in paint and coating removal products. https://www.epa.gov/assessing-and-managing-chemicals-under-tsca/fact-sheet-n-methylpyrrolidone-nmp#risks It is also used as a formulating agent in pigments, dyes, and inks and in insecticides, herbicides, and fungicides. http://www.who.int/ipcs/publications/cicad/en/cicad35.pdf
Benz[e]acephenanthrylene, benzo[a]pyrene, benzo[def]chrysene, Benzo[e]pyrene,	3, 39156-41-7, 50-00-0, 50-32-8, 5216-25-1, 53-70-3, 548-62-553-00-4, 56-55-3, 569-61-9, 605-50-5, 68-12-2, 71-43-2, 7188889-6, 84-75-3, 872-50-4, 91-22-5, 98-07-7.	3- 9,	Shall not be placed on the market after 1 November 2020 in any of No the following: (a) clothing or related accessories; (b) textiles other than clothing which, under normal or reasonably foreseeable conditions of use, come into contact with human skin to an extent similar to clothing; (c) footwear; (Thresholds, condutions and exeptions apply)	
(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)silanetriol and any of its mono-, di- or tri-O-(alkyl) derivatives (TDFAs)		73	Shall not be placed on the market for supply to the general public No after 2 January 2021 individually or in any combination, in a concentration equal to or greater than 2 ppb by weight of the mixtures containing organic solvents, in spray products. Additional marking and communication details.	
Diisocyanates, O = C=N-R-N = C=O, with R an aliphatic or aromatic hydrocarbon unit of unspecified length		74	Shall not be used as substances on their own, as a constituent in No other substances or in mixtures for industrial and professional use(s) after 24 August 2023, unless: (a) the concentration of diisocyanates individually and in combination is less than 0.1 % by weight, or (b) the employer or self-employed ensures that industrial or professional user(s) have successfully completed training on the safe use of diisocyanates prior to the use of the substance(s) or mixture(s). 2. Shall not be placed on the market as substances on their own, as a constituent in other substances or in mixtures for industrial and professional use(s) after 24 February 2022, unless: (a) the concentration of diisocyanates individually and in combination is less than 0.1 % by weight, or (b) the supplier ensures that the recipient of the substance(s) or mixture(s) is provided with information on the requirements and the following statement is placed on the packaging, in a manner that is visibly distinct from the rest of the label information: "As from 24 August 2023 adequate training is required before industrial or professional use".	